



Department of
Transport

Camera Surveillance Unit Standards 2019



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Background

The *Camera Surveillance Unit (CSU) Standards 2019* are provided to guide camera system suppliers on the requirements for approval of a CSU device for use in taxis in Western Australia. On receipt of an application for use of a device in WA, the Department of Transport (DoT) will use these standards to determine if the device is suitable.

Any provider wanting to have their device approved for use in WA should refer to these standards.

Application

Changes to the *Transport (Road Passenger Services) Regulations 2019* set to be published in July 2019 will introduce the following changes to the way CSUs in taxis are regulated:

1. Taxis will be known as Passenger Transport Vehicles - Rank or Hail (PTVRH).
2. Where previously regional taxis did not need to have a CSU, all taxis operating in WA will be required to have a CSU of an approved type.
3. Authorised On-demand Booking Services will have restricted access to the recordings from CSUs installed in taxis which they dispatch to. For example, to investigate customer complaints or to support insurance claims.
4. On-demand Booking Services will also be required to provide copies of recordings to Police, the Department of Transport and other agencies as required.

These changes and the new standard will be implemented between July 2019 and July 2020 as follows:

- Vehicles operating as a licenced taxi (*Taxi Act 1994*) just prior to the introduction of new regulations will not be required to change their existing camera systems until 1 July 2020.
- Vehicles operating as a licenced taxi-car (*Transport Coordination Act 1966*) at the time of introduction of new regulations will not be required to obtain a camera system until 1 July 2020 except where the vehicle is used for any journeys that begin and end in the metropolitan region as defined in the *Transport (Road Passenger Services) Act 2018*.
- After 1 July 2020 all Passenger Transport Vehicles - Rank or Hail are required to have a CSU which meets the 2019 standard.
- Between 1 July 2019 and 1 July 2020 if the taxi was previously licenced under the *Taxi Act 1994*, the DoT will continue to provide download services for Police and for departmental investigations. Once a new CSU meeting the Camera Surveillance Unit Standards 2019 is installed in the taxi, the authorised On-Demand Booking Service will be responsible for conducting downloads in accordance with the new regulations.
- All vehicles which are newly authorised as a PTVRH on or after the day that new regulations are introduced (early July) are required to have a CSU which meets these standards.
- A list of approved CSUs that meets this standard will be published on the DoT website: <https://www.transport.wa.gov.au/On-demandTransport/taxi-camera-surveillance-units.asp>

Camera Surveillance Unit Standards 2019

1. Definitions

Camera means the component of the camera system that captures images inside and outside of the Taxi, and is separate from the control unit which contains the security camera logic and images collected by the camera.

Camera System means all the security camera components including, but not limited to, a control unit, recording unit, camera heads, cables and any other components required to make the system operate correctly.

2. Environmental requirements

- 2.1. The camera system must be operational in an environment over:
 - a) temperature range of -5°C to $+60^{\circ}\text{C}$; and
 - b) humidity range of 0 to 85 per cent relative humidity, non-condensing.
- 2.2. The camera system must be impact and shock resistant, sufficient to withstand the vibration experienced during the normal operation of the passenger transport vehicle it is installed in.
- 2.3. Images from the camera system must be capable of being recovered following loss of power to the camera system.

3. System operation

- 3.1. Must be powered and fully operational, recording and storing images within 30 seconds or less from the time the vehicle's ignition is on.
- 3.2. Must be fixed securely in position and not allow any person to turn off or in any way disable the system, including a tamper proof power connection to the system.
- 3.3. Must have a clear self-checking function with system status indicators that are clearly visible to the driver when in their normal seated position.
- 3.4. The cameras (other than a camera fitted to the exterior of a vehicle) must be visible to passengers in the vehicle.
- 3.5. The system (other than a camera fitted to the exterior of a vehicle), must at all times record a clear view of the taxi driver and all passengers when seated in the vehicle, including their entire upper body from the waist to the top of the head. Additional cameras may be required to achieve this in larger vehicles.
- 3.6. The camera system must record continuously and store images for a minimum of 288 hours.
- 3.7. The camera system must be capable of recording a minimum of 5 frames per second for each camera head connected to the camera system
- 3.8. The camera surveillance unit must clearly record and store all voices within the interior of the vehicle during normal operation of the vehicle.
- 3.9. Installation must provide wiring or capacitors to allow for voltage variants between 8VDC – 18DVC and ensure that the CSU will not interfere with other systems found in a taxi or that other electronic systems will not cause the system to operate unreliably.

- 3.10. Must meet applicable Australian Standards current at the time of supply of the device relating to:
- a) alarm systems;
 - b) vehicle immobilisers; and
 - c) electromagnetic compatibility.
- 3.11. The recording system must be configured so that the recording medium automatically commences re-recording when the medium has reached its recording capacity. The oldest recordings must be overwritten first.
- 3.12. The camera system must log all:
- a) faults;
 - b) times the camera system has been accessed;
 - c) software updates; and
 - d) image downloads;
- Logs must be kept for 288 hours.

4. Images

- 4.1. The CSU, when recording, must meet ANZPAA recommendations on facial recognition (images to a facial identification quality of 120%) for CCTV Systems.
- 4.2. The resolution and clarity of the recorded images from a camera must be maintained under lighting conditions from darkness (0 lux) through to sunlight (50,000 lux).
- 4.3. All images (either displayed on a computer device or printed) must have imprinted on them the following metadata (without obstructing the view of any occupant in a seated position in the vehicle):
- a) the vehicle registration number and VIN
 - b) date and time in Universal Time Coordinated (UTC) within one second; and
 - c) location in coordinates of latitude and longitude accurate to within 25 metres 95 per cent of the time.
- 4.4. In line with the *Surveillance Devices Act 1998*, the *Commonwealth Privacy Act 1998* and in accordance with the Australian Privacy Principles, a notice of Security Camera and Audio Surveillance System operation is required to be displayed externally on all passenger doors in a clearly visible position. The notice shall inform passengers entering the vehicle that a security camera surveillance system is operating and recording images and sound inside the vehicle.

5. Security of recordings

- 5.1. If the system stores images remotely, the remote storage function must include an automated encrypted transmission. Images must be retained in the vehicle camera surveillance unit until confirmation has been received by the CSU that the transmitted images have been received at the remote location.

- 5.2. If an image is stored on the hard drive of a computer, access to the image must be password protected so that it cannot be viewed, copied, deleted, printed or otherwise reproduced by an unauthorised person. The download software must be password protected to prevent unauthorised viewing, recovery and/or reproduction of images. The system must restrict access to camera system recordings to:
 - a) the manufacturer / agents of the manufacturer (for installation and maintenance purposes only); and
 - b) a specified person of an authorised On-demand Booking Service as defined in the *Transport (Road Passenger Services) Regulations 2019*.
- 5.3. Camera Surveillance Units must be registered with the WA Police State CCTV Register.
- 5.4. Sound recordings must be retained and secured in the same manner as video recordings.
- 5.5. Access to camera surveillance unit software must be password protected to prevent unauthorised viewing, recovery and reproduction of images.
- 5.6. Access to camera surveillance unit images must be password protected so that images cannot be viewed, copied, deleted, printed or otherwise reproduced by an unauthorised person
- 5.7. Access to camera surveillance unit recordings must be restricted to as per the *Transport (Road Passenger Services) Regulations 2019*.
- 5.8. If an image is stored on a remote storage device other than the camera surveillance unit, access to the images must be password protected so that it cannot be viewed, copied, deleted, printed or otherwise reproduced by an unauthorised person.
- 5.9. If the camera surveillance unit has removable memory, it must only be accessible by Authorised Persons, as defined in the *Transport (Road Passenger Services) Regulations 2019*. Anti-tamper protection devices may be used.
- 5.10. If an image is stored on a remote storage device other than the camera surveillance unit, access to the images must be password protected so that it cannot be viewed, copied, deleted, printed or otherwise reproduced by an unauthorised person.

Glossary/definitions

Table 1 – Definitions and abbreviations

Term	Meaning
ANZPAA	Australian and New Zealand Policing Advisory Agency.
Camera	The component of the camera system that captures images inside and outside of the taxi, and is separate from the control unit which contains the security camera logic and images collected by the camera.
Camera System	All the security camera components including, but not limited to, a control unit, recording unit, camera heads, cables and any other components required to make the system operate correctly.
DoT	Department of Transport, Western Australia.
IP67	An IP (Ingress Protection) rating is an international standard that shows you the level of ingress protection. IP67 Rating means that the device is resistant against water ingress to a maximum of 1 metre of water for up to 30 minutes, as well as protected against dust ingress.
Licensing authority	Department of Transport, Western Australia (DOT).
Responsible Person	In relation to the provider of an authorised On-demand booking service, means a person who is nominated under section 29(4)(c) of the <i>Transport (Road Passenger Services) Act 2018</i> to represent the provider in providing the on-demand booking service; and who meets the criteria set out in section 30 of the <i>Transport (Road Passenger Services) Act 2018</i> .
SMS	A Safety Management System as per regulation 9 of the <i>Transport (Road Passenger Services) Regulations 2019</i> .
Specifications	Requirements set out in section 4 of this document.
Specified Person	A person authorised by an On-demand Booking Service or the responsible person of an On-demand Booking Service
TV lines	Television lines (TVL) is a specification of an analogue camera's or monitors' horizontal resolution power. It is alternatively known as Lines of Horizontal Resolution (LoHR) or lines of resolution.
UTC	Coordinated Universal Time
Visual indicator	A visual display inside the vehicle that indicates the operational status of the camera system that can be seen from the normal driver position.

Related information

Australian and New Zealand Police Recommendations for CCTV Systems – ANZPAA

AS 4806.1-2006 - Australian Standard Closed Circuit Television (CCTV) Part 1 Management and Operation -2015

AS/NZS 3749.1:2003 Intruder alarm systems

AS/NZS 4601:1999 Vehicle immobilisers

AS/NZS 61000 Electromagnetic compatibility

Privacy Act 1988

Surveillance Devices Act 1998

Taxi Act 1994

Taxi Regulations 1995

Transport Co-ordination Act 1966

Transport (Road Passenger Services) Act 2018

Transport (Road Passenger Services) Regulations 2019